copy dains

5

10

15

20

25

TSRI 626.1 Div I SN 10/001,611

#### **APPENDIX II**

### RESTATEMENT OF ALL CLAIMS WITH MARKINGS TO SHOW CHANGES MADE TO PRESENTLY AMENDED CLAIMS

1. (presently amended) A process for synthesizing a dihydroindole C-ring of a CC-1065/duocarmycin analog, the dihydroindole C-ring of a CC-1065/duocarmycin analog being represented by the following structure:

$$\begin{array}{c|c}
R^2 & & C \\
\hline
R^3 & & N \\
R^4 & & BOC
\end{array}$$

the process comprising the following steps:

Step A: allylating an ortho-haloaniline ortho-halo-2-aminonaphthaline with 1,3-dichloropropene for forming a vinyl chloride, the ortho-haloaniline ortho-halo-2-aminonaphthaline being represented by the following structure:

$$R^3$$
 $R^5$ 
 $R^2$ 
 $R^1$ 
 $R^5$ 
 $R^5$ 
 $R^5$ 
 $R^6$ 
 $R^6$ 

wherein:

R<sup>1</sup> is a hydroxyl protecting group; and

R<sup>2</sup>, R<sup>3</sup>, and R<sup>4</sup>, and R<sup>5</sup> are radicals independently selected from the group consisting of hydrogen, alkyl(C1-C6), alkoxy, cyano, and arylalkoxy, with a proviso that R<sup>1</sup> and R<sup>2</sup>, or R<sup>2</sup> and R<sup>3</sup> may form a fused 5- or 6-membered ring with or without a heteroatom; and

**X** is a halide selected from the group consisting of bromine and iodine; and the vinyl chloride is represented by the following structure:

### **RESTATEMENT OF ALL CLAIMS WITH** MARKINGS TO SHOW CHANGES MADE TO PRESENTLY AMENDED CLAIMS

$$R^{2}$$
 $R^{3}$ 
 $R^{4}$ 
 $R^{4}$ 
 $R^{2}$ 
 $R^{3}$ 
 $R^{4}$ 
 $R^{4}$ 

$$R^3$$
 $R^4$ 
 $R^5$ 
 $R^2$ 
 $R^1$ 
 $R^5$ 
 $R^5$ 

Step B: cyclizing the vinyl chloride of said step A for forming the dihydroindole C-ring of the CC-1065 /duocarmycin analog.

2. (withdrawn) A compound represented by the following structure:

10

5

3. (withdrawn) A compound represented by the following structure:

15

4. (withdrawn) A compound represented by the following structure:

20

5. (withdrawn) A compound represented by the following structure:

### RESTATEMENT OF ALL CLAIMS WITH MARKINGS TO SHOW CHANGES MADE TO PRESENTLY AMENDED CLAIMS

6. (withdrawn) A compound represented by the following structure:

7. (withdrawn) A compound represented by the following structure:

8. (withdrawn) A compound represented by the following structure:

10

9. (withdrawn) A compound represented by the following structure:

15

10. (withdrawn) A compound represented by the following structure:

20

11. (withdrawn) A compound represented by the following structure:  ${\rm CO_2Me}$ 

# RESTATEMENT OF ALL CLAIMS WITH MARKINGS TO SHOW CHANGES MADE TO PRESENTLY AMENDED CLAIMS

12. (withdrawn) A compound represented by the following structure:

5 13. (withdrawn) A compound represented by the following structure:

14. (withdrawn) A compound represented by the following structure:

10

15. (withdrawn) A compound represented by the following structure:

15

16. (withdrawn) A compound represented by the following structure:

20

17. (withdrawn) A compound represented by the following structure:

25

18. (withdrawn) A compound represented by the following structure:

## RESTATEMENT OF ALL CLAIMS WITH MARKINGS TO SHOW CHANGES MADE TO PRESENTLY AMENDED CLAIMS

- 19. (presently amended) A process according to claim 1 wherein, in said Step A, the ortho-haloaniline ortho-halo-2-aminonaphthaline is an ortho-bromo-amiline ortho-bromo-2-aminonaphthaline.
- 20. (presently amended) A process according to claim 1 wherein, in said Step A, the ortho-haloaniline ortho-halo-2-aminonaphthaline is an ortho-iodoaniline ortho-iodo-2-aminonaphthaline.
  - 21. (cancelled) A process according to claim 1 wherein, in said Step A, the *ortho*-haloaniline is protected with a BOC group.

15

- 22. (previously added) A process according to claim 1 wherein, in said Step A, said allylation is catalyzed by the addition of a catalytic amount of tetra-*n*-butylammonium iodide.
- 23. (previously added) A process according to claim 1 wherein, in said Step B, said cyclization is performed with an addition of tri-*n*-butyltin hydride.
  - 24. (previously added) A process according to claim 23 wherein, in said Step B, said cyclization is catalyzed by the addition of a catalytic amount of AIBN.
  - 25. (previously added) A process according to claim 24 wherein, in said Step B, said cyclization is performed using toluene as the solvent.

### RESTATEMENT OF ALL CLAIMS WITH MARKINGS TO SHOW CHANGES MADE TO PRESENTLY AMENDED CLAIMS

26. (previously added) A process according to claim 1 wherein, in said Step A, the vinyl chloride is represented by the following structure:

in said Step B, the dihydroindole C-ring of the CC-1065/duocarmycin analog is represented by the following structure:

27. (previously added) A process according to claim 1 wherein:

in said Step A, the vinyl chloride is represented by the following structure:

in said Step B, the dihydroindole C-ring of the CC-1065 / duocarmycin analog is represented by the following structure:

5

10

15

20

### RESTATEMENT OF ALL CLAIMS WITH MARKINGS TO SHOW CHANGES MADE TO PRESENTLY AMENDED CLAIMS

28. (cancelled) A process according to claim 1 wherein:

in said Step A, the vinyl chloride is represented by the following structure:

in said Step B, the dihydroindole C-ring of the CC-1065 / duocarmycin analog is represented by the following structure:

29. (cancelled) A process according to claim 1 wherein: in said Step A, the vinyl chloride is represented by the following structure:

in said Step B, the dihydroindole C-ring of the CC-1065 / duocarmycin analog is represented by the following structure:

10

15

20

# RESTATEMENT OF ALL CLAIMS WITH MARKINGS TO SHOW CHANGES MADE TO PRESENTLY AMENDED CLAIMS

30. (cancelled) A process according to claim 1 wherein:

in said Step A, the vinyl chloride is represented by the following structure:

in said Step B, the dihydroindole C-ring of the CC-1065 / duocarmycin analog is represented by the following structure:

31. (cancelled) A process according to claim 1 wherein:

in said Step A, the vinyl chloride is represented by the following structure:

in said Step B, the dihydroindole C-ring of the CC-1065 / duocarmycin analog is represented by the following structure:

25

### RESTATEMENT OF ALL CLAIMS WITH MARKINGS TO SHOW CHANGES MADE TO PRESENTLY AMENDED CLAIMS

32. (previously added) A process for synthesizing a dihydroindole C-ring of a CC-1065/duocarmycin analog, the dihydroindole C-ring of a CC-1065/duocarmycin analog being represented by the following structure:

the process comprising the following steps:

Step A: allylating an *ortho*-haloaniline with 1,3-dichloropropene for forming a vinyl chloride, the *ortho*-haloaniline being represented by the following structure:

the vinyl chloride being represented by the following structure:

Step B: cyclizing the vinyl chloride of said step A for forming the dihydroindole C-ring of the CC-1065 / duocarmycin analog.